<u>**REMARKS**</u>

This communication is a full and timely response to the aforementioned final Office Action dated May 28, 2009. By this communication, claims 1, 5 and 18 are amended. Claims 4, 6, 8, 9, 16, 19, 21-25 and 27 are not amended and remain in the application. Thus, claims 1, 4-6, 8, 9, 16, 18, 19, 21-25 and 27 are pending in the application. Claims 1, 5, 16, 18 and 21 are independent.

Reconsideration of the application and withdrawal of the rejections of the claims are respectfully requested in view of the foregoing amendments and the following remarks.

I.   Allowed Claims

Applicants thank the Examiner for kindly indicating that claims 16 and 21-23 are allowed. No amendments have been made to the allowed claims.

II.   Claim Amendments

Claims 1, 5 and 18 have each been amended to positively tie various elements of the respective methods of claims 1, 5 and 18 to a particular device, in view of the Office's interpretation of *In re Bilski*, 88 USQP2d 1385, 1391 (Fed. Cir. 2008). The amendments to claims 1, 5 and 18 do not require further search and/or consideration in relation to prior art. Therefore, Applicants respectfully request entry of the amendments to claims 1, 5 and 18 in response to the final Office Action.

III.   Rejections Under 35 U.S.C. § 101

Claims 1, 4-6, 8, 9, 18, 19, 24, 25 and 27 are rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter.

Without acquiescing to this rejection, independent claims 1, 5 and 18 have each been amended to positively tie various elements of the respective methods of these claims to a specific device, in view of the Office's evolving standard of patent-eligibility of method claims under 35 U.S.C. § 101.

In *Bilski*, the Federal Circuit held that a "claimed process is <u>surely</u> patent-eligible under § 101 if (1) it is tied to a particular machine, or (2) it transforms a

particular article into a different state or thing." *In re Bilski*, 88 USQP2d 1385, 1391 (2008) (emphasis added).

Claims 1, 5 and 18 satisfy at least the machine criterion of the machine-or-transformation test of *Bilski*, because steps central to the claimed methods are tied to physical, discrete devices, in compliance with the machine criterion of the machine-or-transformation test.

The physical, discrete devices recited in amended claims 1, 5 and 18 are supported throughout the specification and drawings. For example, the processing unit recited in claims 1, 5 and 18 can be encompassed by the vector processing engine 14 illustrated in Figure 1 as well as the vector processor 14 illustrated in Figure 5. The memory unit recited in claims 1, 5 and 18 can be encompassed by the memory 16 illustrated in Figure 1 as well as the registers 22-30 illustrated in Figure 5.

Accordingly, by positively tying steps central to the methods of claims 1, 5 and 18 to a specific device, Applicants respectfully submit that claims 1, 5 and 18, as well as claims 4, 6, 8, 9, 19, 24, 25 and 27 which depend therefrom, comply with at least the machine criterion of the machine-or-transformation test of *Bilski*. Therefore, Applicants respectfully request that the rejections of claims 1, 4-6, 8, 9, 18, 19, 24, 25 and 27 under 35 U.S.C. § 101 be withdrawn.

Having overcome their rejections under 35 U.S.C. § 101, Applicants respectfully submit that claims 1, 4-6, 8, 9, 18, 19, 24, 25 and 27 are now in condition for allowance.

IV.   Rejections Under 35 U.S.C. § 103

Claims 18 and 19 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Betrisey et al. (U.S. Patent No. 6,360,023, hereinafter "Betrisey") in view of Hurley (U.S. Patent No. 5,235,410). This rejection is respectfully traversed for at least the following reasons.

To establish a *prima facie* case of obviousness, the applied references must disclose or suggest all the claim limitations. See *In re Royka*, 180 USPQ 580 (CCPA 1974). If the applied references fail to disclose or suggest one or more of the

features of a claimed invention, then the rejection is improper and must be withdrawn.

Claim 18 recites a method for processing an image for display in a computer system. The method of claim 18 comprises, in part, the following steps:

(A) generating, in a processing unit of the computer system, a corrected display value in a second color space by evaluating a second-order polynomial that approximates a power function corresponding to the gamma of a display device, in accordance with an input display value; and

(B) converting, in the processing unit of the computer system, the processed display value to the first color space by evaluating a polynomial that is the inverse of the second-order polynomial in accordance with the processed display value.

As acknowledged by the Office, Betrisey does not disclose or suggest features (A) and (B) of claim 18. In an attempt to arrive at these features, the Office applied Hurley. The Office's reliance on and interpretation of Hurley is not supportable, for at least the following reasons.

Hurley discloses an apparatus for processing digital signals non-linearly, to approximate a required non-linear operation by using a quadratic function. With reference to Figure 6, Hurley discloses that $Z = ax^2 + bx$ is the quadratic function that is used. With reference to Figure 8, Hurley discloses that a digital signal to be processed is input via input terminal 10 to a low-pass filter 12. The bandlimited digital signal is then supplied to a non-linear quadratic transformation circuit 14, which outputs a result according to the above quadratic function. The purpose of this technique is to ensure that the second harmonic of the input signal is kept below a Nyquist frequency limit relative to the band threshold of the low-pass filter 12 (see Column 5, lines 7-29).

The Office continues to allege that Hurley somehow discloses feature (B) as recited in claim 18. In particular, the Office alleges that Hurley discloses the feature of converting a display value, which is generated in a second color space by evaluating a second-order polynomial that approximates a power function, into a first color space by evaluating a polynomial that is the inverse of the second-order polynomial. However, other than offering a wholly conclusory assertion, the Office does not provide any indication of what portion of Hurley is believed to support the

contention that the bandlimited data output from the non-linear quadratic transformation circuit 14 is converted by evaluating a polynomial that is the inverse of the quadratic function applied by the non-linear quadratic transformation circuit 14.

Contrary to the Office's unsupported allegation, there is no disclosure or suggestion in Hurley to support the Office's contention that Hurley converts the bandlimited data output from the non-linear quadratic transformation circuit 14 by evaluating a polynomial that is the inverse of the quadratic function applied by the non-linear quadratic transformation circuit 14. Simply put, there is no disclosure in Hurley where any component of the apparatus converts any signal by an <u>inverse of the quadratic function</u>.

If the Office is to maintain its unsupported interpretation, the Office is respectfully requested to identify, with particularity, what portions of Hurley are believed to support the interpretation that Hurley somehow converts a signal by an inverse of the quadratic function $Z = ax^2 + bx$. The Office relies on the quadratic function of $Z = ax^2 + bx$ in an attempt to arrive at feature (A) of claim 18. However, the Office does not demonstrate that data is converted by an inverse of this quadratic function, presumably because this feature cannot be found in Hurley.

Applicants respectfully submit that, similar to Betrisey, Hurley does not disclose or suggest at least feature (B) as recited in claim 18.

Accordingly, for at least the foregoing reasons, Applicants respectfully submit that claim 18 is patentable over Betrisey and Hurley, since Betrisey and Hurley, either individually or in combination, do not disclose or suggest all the recited features of claim 18.

Dependent claim 19 recites further distinguishing features over Betrisey and Hurley, and is also patentable by virtue of depending from claim 18.

V.   Conclusion

For at least the reasons presented above, Applicants respectfully submit that claims 1, 4-6, 8, 9, 16, 18, 19, 21-25 and 27 are in condition for allowance. A favorable examination and consideration of the instant application are respectfully requested.

If, after reviewing this Amendment, the Examiner believes there are any issues remaining which must be resolved before the application can be passed to issue, the Examiner is respectfully requested to contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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